NEW DESCRIPTIONS

PUNTIUS SHARMAI, A NEW CYPRINID FISH FROM MADRAS1

A.G.K. MENON AND K. REMA DEVI²
(With a text-figure)

Puntius sharmai sp. nov., a small puntiid, is described from Madras. It is closely related to Puntius fraseri Hora & Misra (1938) known from Deolali, the headwaters of Godavari in Maharashtra.

INTRODUCTION

A recent collection of small puntiids from freshwater tanks around Madras contained an interesting species hitherto unknown to science, which is described here. Descriptions are based on measurements with dial callipers with an accuracy of 0.02 mm and are presented as times in standard length (SL) and head length (HL) with the mean, followed by the range in parentheses.

Diagnosis: A small sized *Puntius* with one pair of barbels, a serrated osseous dorsal spine, an incomplete lateral line, with more than 42 scales along the sides, considerably elongated fins, a dark lateral band ending in a blotch in caudal base.

Holotype: 1 ex., 27.0 mm SL, Mogappair, West Annanagar, Madras, Tamil nadu, 4 Dec. 1990, Coll: Malaria Research Centre, Madras, Reg. No. F. 3768, Zoological Survey of India, Southern Regional Station, Madras.

Paratypes: 2 exs., 24.5 and 25.5 mm SL, Tenneri Tank, near Kunrathur, Tamil Nadu, 6 Dec. 1975, Coll: M.B. Raghunathan, Reg. No. F. 3771.

Puntius sharmai sp. nov. (Fig. 1)

Description: D.3/8; P.1/12-13; V.1/8; A.3/5; C.1/17/1; Ll. 42; L.tr. $7^1/_2/6^1/_2$; Predorsal scales about 15.

Head small, 4.89 (4.78-5.04) in TL, 3.56 (3.51-3.62) in SL. Width of head 1.84 (1.75-2.0), its height 1.35 (1.31-1.42), length of snout 3.34 (3.11-3.55), eye diameter 3.26 (3.06-3.45), interorbital width 3.16 (2.95-3.48) in head length. Maxillary barbels very small, 2.47 (2.27-2.86) in eye diameter. Depth of body slightly greater than head length and is 4.78 (4.67-4.96) in TL and 3.48 (3.38-3.59) in SL. Caudal peduncle long and narrow, its least height being 1.31 (1.11-1.55) in its length

Predorsal distance 2.09 (1.90-2.19), post-dorsal distance 1.96 (1.84-2.09), prepelvic distance 1.95 (1.93-1.98), preanal distance 1.42 (1.39-1.44) in SL; distance from pectoral origin to pelvic origin 3.72 (3.67-3.81), from pelvic to anal origin 4.79 (4.55-5.06), from pectoral base to anus (length of body cavity) 2.23 (2.17-2.33) in SL.

The fins are well developed and the anterior rays are prolonged. Dorsal situated midway between tip of snout and caudal base; the first spine is very small and the third spine is well developed, osseous and serrated. Predorsal distance 0.94 (0.89-0.97) in postdorsal distance. Height of dorsal fin 3.86 (3.60-4.01) in SL, 1.11 (1.04-1.17) in body depth, and 1.08 (1.01-1.14) in HL. Pectoral fin long and extends to pelvic base, and is 1.33 (1.32-1.37) in HL, 4.75 (4.67-4.80) in SL; anterior rays of pelvic fin prolonged and extend beyond anal origin and is 4.44 (4.31-4.53) in SL, the first two branched rays of anal fin are greatly prolonged and are 3.50 (3.49-3.51) in SL. Caudal deeply forked, considerably longer than head and is 2.67 (2.55-2.88) in SL.

Accepted May 1992.

²Zoological Survey of India, Southern Regional Station, 100, Santhome High Road, Madras 600 028.

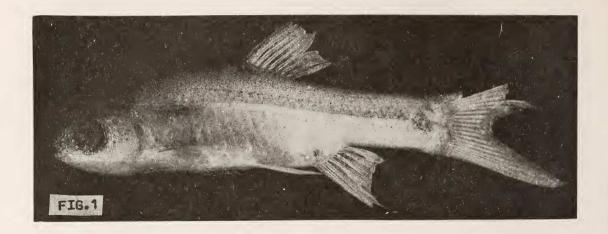


Fig. 1. Lateral view of Puntius sharmai sp. nov., 27.0 mm SL.

Scales small, numerous, 42 scales up to caudal base; lateral line pores extend up to the seventh scale.

Sensory canal pores as radiating vertical rows from below eye on cheek. About 12 minute gill-rakers are present on the first gill arch.

In formaldehyde, the specimens appear dark along the dorsal surface. Along the middle of the body there is a pale horizontal streak; above this a dark band is seen which ends in a blotch on the caudal base. Base of the anterior rays of the dorsal fin dark; a dark spot above anterior anal base.

The new species is closely allied to *Puntius fraseri* Hora and Misra (1938, *JBNHS* 40: 20-38), described from Darna river, Deolali, Maharashtra, but can be easily distinguished by its more streamlined body, the depth of body—is 4.78 (4.67-4.96) in TL, 3.48 (3.38-3.59) in SL, (4.3-4.4 in TL and 3.2 in SL in *P. fraseri*)—and smaller head, 4.89 (4.78-5.04) in TL, 3.56 (3.51-3.62) in SL, (5.4 in TL and 4 in SL in *P. fraseri*).

The fins are greatly prolonged in the new species; the pectoral reaches pelvic origin whereas in *P. fraseri* it is separated by a considerable distance; the anal rays are prolonged and extend close to the caudal base while in the latter it is shorter and separated from caudal base, by a considerable distance. The lateral line pores extend up to the seventh scale in *P. sharmai* (upto the eighth to tenth scales in *P. fraseri*). The new species is considered as a useful larvicidal fish for use in malaria control.

Etymology: The fish is named after Dr. V. P. Sharma, Director, Malaria Research Centre, New Delhi, in recognition of his keen interest in the study of indigenous larvivorous fishes of India.

ACKNOWLEDGEMENTS

We are greatful to the Director, Zoological Survey of India, for providing necessary facilities.